



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,634	02/13/2004	Timothy Patrick Jon Perry	52493.000368	5377

21967 7590 05/12/2009

HUNTON & WILLIAMS LLP
INTELLECTUAL PROPERTY DEPARTMENT
1900 K STREET, N.W.
SUITE 1200
WASHINGTON, DC 20006-1109

EXAMINER

PHONGSVIRAJATI, POONSIN

ART UNIT	PAPER NUMBER
----------	--------------

3686

MAIL DATE	DELIVERY MODE
-----------	---------------

05/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/777,634	PERRY ET AL.	
	Examiner	Art Unit	
	SIND PHONGSVIRAJATI	3686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 1 recites the limitations, "the rules engine determines whether each of the at least one data element has been fully validated as clean data", "the rules engine generates an exception task if it is determined that at least one data element is not clean", "the rules engine receives a resolution to the exception task, thereby enabling validation of the at least one data element". All of the above limitations are directed towards method steps of performing the disclosed invention, however, the other limitations establish a structure which infers that claim 1 is an apparatus. It is unclear as to whether claim 1 discloses a method or an apparatus (*IPXL Holdings v. Amazon.com, Inc.*, 430 F.2d 1377, 1384, 77 USPQ2d 1140, 1145 (Fed. Cir. 2005)(MPEP 2173.05(p))). Claims 2-9 fail to cure the deficiencies of claim 1 and incorporate the same rejection and reasoning as claim 1.

4. Claim 10 recites the limitations, "the rules engine determines whether each of the at least one data element has been fully validated as clean data", "the state machine generates workflow tasks to enable case progression through the system", "the state machine receives responses to said workflow tasks", and "the state machine determines case progression based upon said responses" All of the above limitations are directed towards method steps of performing the disclosed invention, however, the other limitations establish a structure which infers that claim 1 is an apparatus. It is unclear as to whether claim 1 discloses a method or an apparatus (*IPXL Holdings v. Amazon.com, Inc.*, 430 F.2d 1377, 1384, 77 USPQ2d 1140, 1145 (Fed. Cir. 2005)(MPEP 2173.05(p))). Claim 11 fail to cure the deficiencies of claim 1 and incorporate the same rejection and reasoning as claim 10.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 12-17 are rejected under 35 U.S.C. 101 as being directed towards non-statutory subject matter based on Supreme Court precedent, and recent Federal Circuit decisions, *In re Bilski U.S. Court of Appeals Federal Circuit 88 USPQ2d 1385*. The machine-or-transformation test is a two-branched inquiry; an applicant may show that a process claim satisfies § 101 either by showing that his claim is tied to a particular

machine, or by showing that his claim transforms an article. See *Benson*, 409 U.S. at 70. Certain considerations are applicable to analysis under either branch. First, as illustrated by *Benson* and discussed below, the use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility. See *Benson*, 409 U.S. at 71-72. Second, the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity. See *Flook*, 437 U.S. at 590.

7. The methods recited in claims 12-17 are not tied to a machine nor transform the underlying subject matter to a different state or thing. See *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); and *Gottschalk v. Benson*, 409 U.S. 63, 71 (1972).

8. Based on Supreme Court precedent, a method/process claim must (1) be tied to another statutory class of invention (such as a particular apparatus) (see at least *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing (see at least *Gottschalk v. Benson*, 409 U.S. 63, 71 (1972)).

9. A method/process claim that fails to meet one of the above requirements is not in compliance with the statutory requirements of 35 U.S.C. 101 for patent eligible subject

matter. Here claims 12-17 fail to meet the above requirements because they are not tied to another statutory class of invention.

10. Nominal recitations of structure in an otherwise ineligible method fail to make the method a statutory process. See *Benson*, 409 U.S. at 71-72. As *Comiskey* recognized, "the mere use of the machine to collect data necessary for application of the mental process may not make the claim patentable subject matter." *Comiskey*, 499 F.3d at 1380 (citing *In re Grams*, 888 F.2d 835, 839-40 (Fed. Cir.1989)). Incidental physical limitations, such as data gathering, field of use limitations, and post-solution activity are not enough to convert an abstract idea into a statutory process. In other words, nominal or token recitations of structure in a method claim do not convert an otherwise ineligible claim into an eligible one.

11. The Examiner considers the limitation, "storing the documents electronically in a raw database" to be a nominal recitation of structure used to collect and store data.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 3-12, 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 5,235,654) in view of Scanlon (US 5,850,480).

4. As to **Claim 1**, Anderson teaches a system for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), the system comprising:

- a. a raw data database electronically storing insurance application related documents (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database);
- b. a rules engine that converts the documents into at least one data element having a common format (Anderson, Fig. 4A, Fig. 7A-7E, col. 21 lines 25 to col. 22 line 13);
- c. the clean data is stored in an operational database for use in application processing (Anderson, col. 3 lines 24-33, col. 33 lines 50-66);
- d. the rules engine generates an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and

- e. the rules engine receives a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

Anderson does not specifically disclose the rules engine determining whether each of the at least one data element has been fully validated as clean data. Scanlon does teach the rules engine determining whether each of the at least one data element has been fully validated as clean data (col. 31 lines 42-48 and col. 33 lines 16-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included fully validating each data element as clean data for the motivation for OCR error correction (Scanlon, Abstract).

5. As to **Claim 3**, Anderson teaches the system of claim 1, further comprising: a state machine that monitors clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), wherein the state machine generates workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), wherein the state machine receives responses to said workflow tasks (Anderson, col. 12 lines 1-11), and wherein the state machine determines case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

6. As to **Claim 4**, Anderson teaches the system of claim 1, further comprising: a state machine that monitors data converted by the rules engine (Anderson, col. 12 lines 54-65), wherein the state machine generates data tasks to enable data verification (Anderson, Fig. 4C), wherein the state machine receives responses to said data tasks

(Anderson, Fig. 4C step 204), and wherein the state machine verifies data for forwarding to the operational database based upon said responses (Anderson, col. 32 lines 49-67).

7. As to **Claim 5**, Anderson teaches the system of claim 1, wherein application-related documents include electronic documents and paper documents (Anderson, col. 3 lines 34-41 and col. 4 lines 13-14).

8. As to **Claim 6**, Anderson teaches the system of claim 1, wherein the documents of a first type are stored in a first raw data database and documents of a second type are stored in a second raw data database (Anderson, Fig. 1R element 35).

9. As to **Claim 7**, Anderson teaches the system of claim 1, wherein the exception task instructs a person to perform a task to resolve the exception (Anderson, Fig. 1R element 32, col. 33 lines 8-22).

10. As to **Claim 8**, Anderson teaches the system of claim 1, wherein the exception task instructs an automated process to perform a task to resolve the exception (Anderson, Fig. 1R element 32, col. 32 lines 55-67).

11. As to **Claim 9**, Anderson teaches the system of claim 1, further comprising: the rules engine determines if additional information is required to validate a data element (Anderson, col. 7 lines 5-43, col. 33 lines 8-22); and the rules engine generating an exception task to obtain the additional information (Anderson, col. 6 lines 56-63).

12. As to **Claim 10**, Anderson teaches a system for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), the system

comprising: a raw data database electronically storing insurance application related documents (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database); a rules engine that converts the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); the clean data is stored in an operational database for use in application processing (Anderson, col. 3 lines 24-33); a state machine that monitors clean data in the operational database and rules engine outputs (Anderson, col. 11 lines 59-68), wherein the state machine generates workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), wherein the state machine receives responses to said workflow tasks (Anderson, col. 12 lines 1-11), and wherein the state machine determines case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

Anderson does not specifically disclose the rules engine determining whether each of the at least one data element has been fully validated as clean data. Scanlon does teach the rules engine determining whether each of the at least one data element has been fully validated as clean data (col. 31 lines 42-48 and col. 33 lines 16-31). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included fully validating each data element as clean data for the motivation for OCR error correction (Scanlon, Abstract).

13. As to **Claim 11**, Anderson teaches the system of claim 10, wherein the rules engine generates an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and the rules engine receives a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

14. As to **Claim 12**, Anderson teaches a method for routing and processing insurance related data, comprising:

- a. receiving insurance application-related documents from external sources (Anderson, col. 3 lines 34-56),
- b. storing the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19, the Examiner takes the position that the master machine generated data structure is equivalent to the raw data database);
- c. converting, by a rules engine, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606);
- d. storing clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33);
- e. generating an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and
- f. receiving a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

Anderson does not specifically disclose the rules engine determining whether each of the at least one data element has been fully validated as clean data including; determining that syntax is correct; determining that required information is present; and determining that formatting is proper. Scanlon does teach the rules engine determining whether each of the at least one data element has been fully validated as clean data (col. 31 lines 42-48 and col. 33 lines 16-31) including; determining that syntax is correct (col. 25 lines 57-64); and determining that formatting is proper (col. 3 lines 60-67, col. 25 lines 57-64). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included fully validating each data element as clean data for the motivation for OCR error correction (Scanlon, Abstract).

The combination of Anderson and Scanlon does not specifically disclose wherein such validation including determining that required information is present. However, the Examiner takes official notice that it is well known in the art to determine whether required information is present. For example, most forms such as contact information will not be entered into a system until all the required information is present in order to submit said contact information into the system. It would have been obvious to one of ordinary skill in the art at the time of the invention to include determine whether required information is present within the disclosure of Anderson and Scanlon for the motivation for completing forms to be filled out.

15. As to **Claim 14**, Anderson teaches the method of claim 12, further comprising: monitoring clean data in the operational database and rules engine outputs (Anderson,

col. 11 lines 59-68), generating workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), receiving responses to said workflow tasks (Anderson, col. 12 lines 1-11), and determining case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

16. As to **Claim 15**, Anderson teaches the method of claim 12, wherein the exception task instructs a person to perform a task to resolve the exception (Anderson, Fig. 4C).

17. As to **Claim 16**, Anderson teaches the method of claim 12, wherein the exception task instructs an automated process to perform a task to resolve the exception (Anderson, col. 7 lines 14-20 and see section "Sequential repair of character recognition errors").

18. As to **Claim 17**, Anderson teaches the method of claim 12, further comprising: determining if additional information is required to validate a data element (Anderson, col. 7 lines 5-43, col. 33 lines 8-22); and generating an exception task to obtain the additional information (Anderson, col. 6 lines 56-63).

19. As to **Claim 18**, Anderson teaches a computer-readable medium incorporating instructions for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), comprising: one or more instructions for receiving insurance application-related documents from external sources (Anderson, col. 3 lines 34-56), one or more instructions for storing the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19); one or more instructions for converting, by a

rules engine, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); one or more instructions for determining whether each of the at least one data element has been fully validated as clean data (Anderson, col. 3 lines 24-33); one or more instructions for storing clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33); one or more instructions for generating an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and one or more instructions for receiving a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

20. As to **Claim 19**, Anderson teaches a computer-readable medium incorporating instructions for routing and processing insurance related data (Anderson, Abstract and col. 8 lines 44-52), comprising: one or more instructions for receiving insurance application-related documents from external sources (Anderson, col. 3 lines 34-56), one or more instructions for storing the documents electronically in a raw data database (Anderson, col. 3 line 63 to col. 4 line 19); one or more instructions for converting, by a rules engine, the documents into at least one data element having a common format (Anderson, Fig. 4A steps 602-606); one or more instructions for determining whether each of the at least one data element has been fully validated as clean data (Anderson, col. 3 lines 24-33); one or more instructions for storing clean data in an operational database for use in application processing (Anderson, col. 3 lines 24-33); one or more instructions for monitoring clean data in the operational database and rules engine

outputs (Anderson, col. 11 lines 59-68), one or more instructions for generating workflow tasks to enable case progression through the system, the tasks based upon said clean data and rules engine outputs (Anderson, Fig. 4A), one or more instructions for receiving responses to said workflow tasks (Anderson, col. 12 lines 1-11), and one or more instructions for determining case progression based upon said responses (Anderson, col. 12 lines 17-49 and Fig. 4B).

21. As to **Claim 20**, Anderson teaches the system of claim 19, further comprising: one or more instructions for generating an exception task if it is determined that at least one data element is not clean (Anderson, col. 6 lines 56-63); and one or more instructions for receiving a resolution to the exception task, thereby enabling validation of the at least one data element (Anderson, col. 7 lines 2-13).

22. Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 5,235,654) in view of in view of Scanlon (US 5,850,480) in further view of Applicant Admitted Prior Art (AAPA).

23. As to **Claims 2 and 13**, the combination of Anderson and Scanlon does not specifically disclose that the common format is extensible Markup Language. However, it is well known to those of ordinary skill in the art, that, the coded data in the application program storage database Anderson discloses (Anderson, Fig. 1R element 35) can be structured using any number of general-purpose database storage methodologies, including a XML markup language. Applicant is failed to adequately traverse Examiner's

taking of official notice as required by MPEP 2144.03(C) and the said official notice will be taken as Applicant Admitted Prior Art.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to include storing the data elements and attributes inside an XML document, as is well known to do, in order to organize the folders, tables, fields, and retrieved data elements of Anderson's invention (Anderson, col. 35 line 65 to col. 36 line 28), since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

Response to Arguments

12. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIND PHONGSVIRAJATI whose telephone number is (571) 270-5398. The examiner can normally be reached on Monday - Thursday 8:00am-5:00pm (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry O'Connor can be reached on (571) 272-6787. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or (571) 272-1000.

/S. P./
Examiner, Art Unit 3686
08 May 2009

/Gerald J. O'Connor/
Supervisory Patent Examiner
Group Art Unit 3686